

IN THE CLAIMS

Claims 15 and 22 have been amended. New claims 31 to 37 have been added. The following listing of claims replaces all prior listings and versions of claims in the present application.

Listing of Claims

Claims 1-14 (cancelled)

Claim 15 (currently amended): A filter body for use in a particulate filter for an internal combustion engine, the filter body having internal cavities, formed by using a semiconductor technology type micro-patterning process, the filter body being heatable during operation.

Claim 16 (previously presented): The filter body of claim 15 wherein the micro-patterning process comprises an etching process.

Claim 17 (previously presented): The filter body of claim 15 wherein the micro-patterning process comprises a patterned deposition process.

Claim 18 (previously presented): The filter body of claim 15 wherein the micro-patterning process comprises a combination of an etching process and a patterned deposition process.

Claim 19 (previously presented): The filter body of claim 15 wherein the internal cavities are of differing dimensions.

Claim 20 (previously presented): The filter body of claim 19 wherein the dimensions of the cavities decrease in a direction of flow.

Claim 21 (previously presented): The filter body of claim 20 wherein the dimensions of the cavities remain constant for pre-selected parts of the filter body.

Claim 22 (currently amended): The filter body of claim 20 wherein the dimensions of all of the cavities decrease constantly in the direction of flow.

Claim 23 (previously presented): The filter body of claim 15 wherein the filter body at least partially comprises electrically conductive material.

Claim 24 (previously presented): The filter body of claim 23 wherein the electrically conductive material forms regions of differing specific conductivity.

Claim 25 (previously presented): The filter body of claim 15 wherein the filter body at least in part comprises a material selected from a group consisting of silicon, germanium, a silicon compound, a germanium compound and a solid solution thereof.

Claim 26 (previously presented): The filter body of claim 15 wherein at least part of the filter body has a catalytically active coating.

Claim 27 (previously presented): The filter body of claim 15 wherein at least part of the filter body has an oxide layer.

Claim 28 (previously presented): A particulate filter for a motor vehicle, comprising a housing with at least one gas inlet and at least one gas outlet, and a filter body in the housing, the filter body being formed by using a semiconductor technology type micro-patterning process.

Claim 29 (previously presented): The particulate filter of claim 28 further comprising at least one filter body made from a sintered material.

Claim 30 (previously presented): A vehicle including a particulate filter comprising:

a housing with at least one gas inlet and at least one gas outlet, and
a filter body in the housing,
the filter body being formed by using a semiconductor technology type micro-patterning process.

Claim 31(new): A method for using the filter body as recited in claim 15 comprising:
heating the filter body to burn off particulate matter in the internal cavities.

Claim 32 (new): The method for using the filter body as recited in claim 31 further comprising
installing the filter body within a vehicle exhaust system before the step of heating the filter
body.

Claim 33 (new): The method for using the filter body as recited in claim 31 wherein the step of
heating the filter body comprises applying a voltage to the filter body.

Claim 34 (new): The method for using the filter body as recited in claim 31 wherein the
particulate matter is burnt off the internal cavities by oxidation of the particulate matter into CO₂.

Claim 35 (new): The method for using the filter body as recited in claim 34 further comprising
the step of discharging the CO₂ from the filter body.

Claim 36 (new): The particulate filter of claim 28 further comprising a second filter body in the
housing downstream of the filter body, the filter body including internal cavities that are all of a
first dimension and the second filter body including internal cavities that are all of a second
dimension, the dimension being smaller than the first dimension.

Claim 37 (new): The particulate filter of claim 28 further comprising current terminals passing
through the housing, the current terminals heating the filter body.